

The Case for a Focus Position in Duala\*

Roger Epée  
Cornell University

1. Introduction

In recent years, a number of studies have been devoted to showing the cross-linguistic similarities between relativization, focus constructions and WH- (or constituent) questions (see for example, Keenan (1972), Keenan and Hull (1973), Schachter (1973), Takizala (1973)). Keenan and Hull (1973), for instance, show that the syntactic similarities between those constructions come from their underlying logical similarity: first, in all three cases, a condition given by sentence S is imposed on a constituent separated from S; second, all three constructions "presuppose that some member of the world satisfies that condition" (350). Similarly, Schachter (1973) argues that focus and relativization in a number of languages are best analysed as processes involving the 'foregrounding' of an element from an embedded clause to an empty position higher up in the tree.

The purpose of this paper is to provide additional support both for the close relationship existing between the three processes mentioned above and for a movement analysis of relativization. Specifically, we shall present crucial syntactic evidence from Duala<sup>1</sup> that in order to account for the marker no which occurs in a subset of relative, focus, and WH-question constructions, relativization will have to be analyzed as involving not a deletion, but a movement transformation.

The paper is divided into four parts. First we examine focus constructions and provide the simplest explanation for the occurrence of the marker no. In section 3 the same process is followed with regards to WH-questions. In section 4 we take up relative clauses and show how a deletion analysis fails to capture an obvious generalization about the marker no. Finally, an analysis is suggested which accounts for both no and some other puzzling facts about focus constructions in Duala.

2. Focus constructions

Duala has a very productive process which is used to 'focus' on elements of a sentence. This process is characterized by the invariant morpheme nde as shown below:

- (1) a. Kuo a-andi mutowa mwa Njo kiele  
Kuo PA buy car of Njo yesterday  
'Kuo bought Njo's car yesterday'

- (1) b. Kuo nde a-andi mutowa mwa Njo kiele  
 Kuo foc. PA buy car of Njo yesterday  
 'It's Kuo who bought Njo's car yesterday'
- c. mutowa mwa Njo nde Kuo a-andi no kiele  
 car of Njo foc. Kuo Pa buy yesterday  
 'It's Njo's car Kuo bought yesterday'
- d. kiele nde Kuo a-andi no mutowa mwa Njo  
 yesterday foc. Kuo PA buy car of Njo  
 'It's yesterday Kuo bought Njo's car'
- e. Kuo a-andi nde mu mutowa  
 Kuo PA buy foc. that car  
 'Kuo bought that car'

Sentences (1b) to (1e) show that any of the elements of a sentence can occur as focus of that sentence, if followed by the focusing particle nde. In (1b), the focus is the Subject NP, in (1c) it is the Object NP, in (1d) the time adverb and in (1e) the main verb. Note that the 'normal', unmarked word order of the sentences above when no element is syntactically focused on is as in (1a), that is, SVO. Sentences (1b) and (13) follow the normal SVO word order and can stand alone without the particle nde. However, (1c) and (1d) where the normal surface order is altered are ungrammatical without the underlined particles nde and no.

- (2) a. \*mutowa mwa Njo Kuo a-andi kiele  
 car of Njo Kuo PA buy yesterday
- b. \*kiele Kuo a-andi mutowa mwa Njo  
 yesterday Kuo Pa buy car of Njo

What this shows is that there is a correlation between the preposing of an element from its original postverbal position and focusing. Informally stated, the focus rule says: take a simple sentence; choose the focus of that sentence and place the marker nde immediately to its right; if the element chosen as focus is either the Subject or the main verb of the sentence, nothing more needs to be done, as shown by the sentences below:

- (3) a. Kuo a tápi jombe  
 Kuo PA tough door  
 'Kuo touched the door'
- b. Kuo nde a tápi jombe  
 'Kuo touched the door'
- c. Kuo a tápi nde jombe  
 'Kuo touched the door'<sup>2</sup>

However, if we choose as focus of the sentence any of the constituents which normally occur after the main verb, we can either prepose that constituent together with nde (as in (1c) and (1d)) or leave it in its original position, in which case nde gets inserted not after the focused constituent, but immediately after the verb. This explains the ambiguity of (3c); in discourse, such constructions present no problem usually since there is often



enough information for the appropriate interpretation. Preposing can then be considered a way of disambiguating such sentences when the context does not provide the relevant information.

To summarize, we have seen that focus constructions are marked with the morpheme nde and fall into two classes: those where the focus is the Subject or the verb, and those which have as focus an element occurring to the right of the verb. The former do not involve any movement of constituents, whereas the latter optionally involve moving the constituent on focus, together with nde, to sentence initial position. Of the two classes of focus constructions we have just mentioned, the ones which are of particular interest to us are the ones which involve preposing.

Consider the following pairs of sentences:

- (4) a. no tondí nde wa (seto mo)  
I like foc. you (not him)  
'You're the one I like'  
b. wa nde na tondí no  
'You're the one I like'
- (5) a. Kuo a lom nde telegram (seto leta)  
Kuo PA send foc. telegram (not letter)  
b. telegram nde Kuo a lom no  
'It's a telegram Kuo sent'
- (6) a. na timbí nde o mboa ónola na na si ta na  
I return foc. to home for that I not past I  
bene moni  
have money  
b. ónola na na si ta na bene moni nde na  
'it's because I did not have any money that  
timbí no mboa  
I returned home'
- (7) a. mot-a jango a bo nde ni ngila na ngadi  
man of hunting PA kill foc that lion with gun  
b. na ngadi nde mot-a jango a bo no ni ngila  
'It's with a gun that the hunter killed that lion'

The (a) and (b) pairs above are, for all practical purposes, synonymous: they have the same truth value and share the same pre-supposition and focus. The only syntactic difference between them is that whereas the focused constituent in (a) occurs in its original position (i.e. the position in which it is found in a simple, unmarked sentence), in (b) that constituent has been preposed to sentence initial position. But most important, observe that the morpheme no occurs just in those sentences where the focus is moved to sentence initial position. That a dependency relation exists between no and preposing rather than between no and nde is shown by the fact that nde can occur alone just in those cases where no preposing has taken place. The sentences below show that no is obligatory every time there is evidence for preposing and cannot be present when there has been no preposing:

- (8) a. na mende tilea wa kiele  
I will write you tomorrow  
b. mba nde na mende tilee wa kiele  
'I will write you tomorrow'  
c. \*mba nde na mende no tiles wa kiele  
d. kiele nde na mende no tilea wa  
'I will write you tomorrow'  
e. \*kiele nde na mende tilea wa  
f. wa nde na mende no tilea kiele  
'I will write you tomorrow'  
g. \*wa nde na mende tilea kiele

Sentence (8a) is the normal, unmarked construction; in (8b), the focus is the subject of the sentence; (8c) is ungrammatical because the marker no occurs without there having been a constituent preposed to sentence initial position; the ill-formed strings (8e) and (8g) illustrate cases where preposing has taken place, but without no being inserted; sentences with the same focus in initial position (i.e. (8d) and (8f)) are perfectly acceptable once they have the particle no in post-verbal position.

On the basis of our discussion of focus constructions, this much has been established: nde is the marker of focus; the no which turns up in the sentences so far considered is not directly related to the focusing particle nde, but rather to the rule which optionally moves a constituent from post-verbal position to sentence initial position when that constituent is the focus element of the sentence. Since the movement is always leftward, let us refer to no as the reflex of the leftward movement of a constituent past the main verb.

Next, we shall consider another type of construction in Duala which involves the particle no, namely WH-questions.

### 3. WH-questions

Duala has a constituent question morpheme, njika, which can be followed by a noun meaning 'person', 'thing', 'reason', 'time', etc. For the sake of convenience, we shall henceforth refer to njika as WH. The following is a list of the most common WH-words in Duala; some of them also have a shorter form, as indicated on the right:

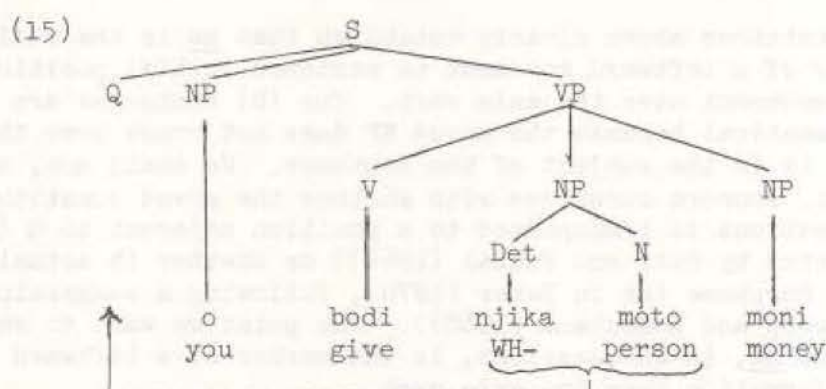
- (9) a. njika moto = nja 'who'  
WH- person  
b. njika lambo = nje 'what'  
WH- thing  
c. njika wuma = o we 'where'  
WH- place  
d. njika ponda 'when'  
WH- time  
e. njika njom 'why'  
WH- reason

The sentences below illustrate the use of those words.



- (10) njika moto o bodi no moni?  
 WH-person you give money  
 'Whom did you give the money to?'
- (11) nje wa pula no?  
 what you want  
 'What do you want?'
- (12) njika wuma Kuo a wele no mulonga?  
 WH- place Kuo PA put bucket  
 'Where did Kuo put the bucket?'
- (13) njika ponda o wu no o ngando  
 WH- time you return from dance  
 'When did you get back from the party?'
- (14) mwaninga mwa bana o ben no?  
 how many of children you have  
 'How many children do you have?'

Assuming, for the time being, that Katz and Postal's (1964) analysis of WH-questions is correct, a sentence such as (10) would be derived from its corresponding declarative, with Q acting as both a semantic and a syntactic marker.



From the underlying structure above one can derive either the short form (10a) or the long form (10):

- (10) njika moto o bodi no moni?  
 'What person did you give the money to?'
- (10) a. nja o bodi no moni?  
 'Whom did you give the money to?'

In either case, the transformation which relates the structure in (15) to sentences (10) and (10a) is similar to Katz and Postal's  $T_1$ : it moves an NP dominating njika (WH-) to sentence initial position. The next thing to account for is the occurrence of the morpheme no. Here again, as was the case with focus constructions, we have a no materializing immediately after the verb, in a sentence where a preposing transformation has taken place. Notice, furthermore, that the movement must be over the main verb, as shown by the fact that when the NP dominating the WH-word is the subject of the sentence, no cannot occur:

- (16) a. nje e poedi wa?  
what RP happen you  
'What happened to you?'  
b. \*nje e poedi no wa
- (17) a. nja ĩ-andi medi?  
who RP buy bicycle  
'Who bought a bicycle?'  
b. \*nja ĩ-andi no medi
- (18) a. njika njom ĩ-alane wa o wo?  
WH- reason RP take you to there  
'Why did you go there?'  
b. \*njika njom ĩ-alane no wa o wo?
- (19) a. njika diboa dí bo mo?  
WH- disease RP kill him  
'What disease did he die of?'  
b. \*njika diboa dí bo no mo?
- (20) a. mwaniga mwa bato mu poi?  
how many of people RP come  
'How many people came?'  
b. \*mwaninga mwa bato mu poi no?

The sentences above clearly establish that no is the reflex, not simply of a leftward movement to sentence initial position, but of a movement over the main verb. The (b) sentences are ungrammatical because the moved NP does not cross over the verb, since it is the subject of the sentence. We shall not, at the moment, concern ourselves with whether the moved constituent in WH-questions is transported to a position adjacent to Q (as suggested by Katz and Postal (1964)) or whether it actually replaces the Q morpheme (as in Baker (1970), following a suggestion made in Jacobs and Rosenbaum (1968)). The point we want to emphasize is that no, in WH-questions, is the marker of a leftward movement transformation over the main verb.

This fact is seen even more clearly if one examines sentences such as the ones below:

- (21) a. o wu njika buña?  
you return WH- day  
'On what day did you return?'  
b. njika buña o wu no?  
WH- day you return  
'On what day did you return?'
- (22) a. Kuo a bodi nja moni?  
Kuo PA give who money  
'Whom did Kuo give money to?'  
b. nja Kuo a bodi no moni?  
'Whom did Kuo give money to?'
- (23) a. o poi jene nja?  
you come see who  
'Whom did you come to see?'  
b. nja o poi no jene?  
'Whom did you come to see?'



- (24) a. Kuo a ben mwaninga mwa bito?  
 Kuo PA have how many of wives  
 'How many wives does Kuo have?'  
 b. mwaninga mwa bito Kuo a ben no?  
 'How many wives does Kuo have?'

The (a) sentences above, which follow the declarative word order, are not echo questions, but legitimate requests for information. The alternation between preposed and non preposed WH-words shows that insofar as WH-movement is a rule of Duala, it is, at least in direct questions, an optional rule. But, most important, observe that the morpheme no occurs only in the (b) sentences, that is, those in which WH-movement has applied. The (a) sentences, which follow the declarative word order, do not exhibit a no.

As can be adduced from the facts presented above, no cannot be explained by the Q morpheme, since WH-movement is optional. Further evidence against trying to explain the occurrence of no through Q in Duala comes from an examination of Indirect WH-questions. These constructions differ from Direct WH-questions in one main respect: whereas the latter involve a choice between the declarative word order and the preposing of the questioned constituent, the former involve no such choice; WH-preposing is always obligatory in indirect questions. Compare the following sets of sentences:

- (25) a. Kuo en nja?  
 Kuo see who  
 b. nja Kuo en no?  
 'Whom did Kuo see?'  
 c. \*na si bi Kuo en nja  
 I not know Kuo see who  
 d. na si bi nja Kuo en no  
 'I don't know whom Kuo saw'
- (26) a. mama a-andi nje o don?  
 mother PA buy what at market  
 b. nje mama a-andi no o don?  
 'What did Mother buy at the market?'  
 c. \*langwea mba mama a-andi nje o don  
 tell me mother PA buy what at market  
 d. langwea mba nje mama a-andi no o don  
 'Tell me what Mother bought at the market'

The contrast between sentences (c) and (d) shows that the only permitted word order in indirect WH-questions is the one in which the question-word occurs in initial position in the embedded clause. WH-preposing is therefore obligatory in indirect questions. Predictably, indirect questions with the questioned constituent to the right of the verb in underlying structure will all contain the marker no (cf. (25d), (26d)), those in which the questioned constituent is the subject in underlying structure will not exhibit a no:

- (27) a. na si bi nja nu ben ni kalati  
I not know who RP have that book  
'I don't know whose book that is'  
b. \*na si bi nja nu ben no ni kalati
- (28) a. langwea mba nje e poedi wa  
tell me what RP happen you  
'Tell me what happened to you'  
b. \*langwea mba nje e poedi no wa

What one gets in sentences where the subject is questioned is a relative pronoun (RP). We shall come back to this matter later. Returning to the issue of relating the occurrence of no to the question morpheme Q, notice that the obligatoriness of WH-preposing in indirect questions rules out any such relation. Why? Mainly because if we accept Katz and Postal's analysis of Q, we will have to say that indirect questions, unlike direct questions, do not have an underlying Q morpheme. The absence of a Q morpheme, one may want to argue, makes WH-preposing obligatory in Duala. That this solution is clearly wrong is shown by the fact that WH-movement can also apply in direct questions which, presumably, contain a Q in underlying structure. An analysis of questions such as the one in Baker (1970) does not help either since it allows the Q morpheme to occur in the underlying structure of both indirect and direct questions; WH-movement can therefore not be explained through the presence or absence of Q.

To summarize: We have shown that both direct and indirect WH-questions exhibit a marker no which, like the one which occurs in focus constructions, is the result of a movement rule. Given the fact that it never occurs when the questioned constituent is the subject of the clause, it must be the result of a movement past the main verb. Let us now consider the last construction in Duala which also takes no, namely relativization.

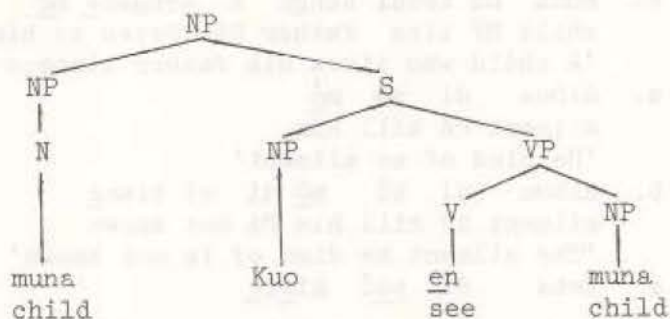
#### 4. Relativization

Consider the following (b) sentences, which are instances of object relativization:

- (29) a. Kuo en muna  
'Kuo saw the child'  
b. muna Kuo en no  
'The child Kuo saw'
- (30) a. na andi konda  
'I bought a chair'  
b. konda na-andi no  
'The chair I bought'
- (31) a. Kuo a duwane mutowa kiele  
Kuo PA drive car yesterday  
'Kuo drove a car yesterday'  
b. mutowa Kuo a duwane no kiele  
car KUO PA drive yesterday  
'The car Kuo drove yesterday'



Current practice in transformational grammar (barring differences of detail) would derive a sentence like (1b) from an underlying structure containing coreferent NP's, like the one below:



Relative Clause Formation in Duala would consist of at least the following rules:

- (A) Tone Raising on the last syllable of the verb  
(can apply vacuously)
- (B) Deletion of the Object NP under identity with the head noun
- (C) Insertion of a marker (no) at the position of the deleted NP.

Of these three rules, only the last two will detain us. Notice that object relativization in Duala does not require a relative pronoun; the pronouns which occur in (29) to (31) are the usual gender agreement morphemes common to most Bantu languages. What is obligatory in object relativization is the presence of the marker no, which must occur in immediate post-verbal position. This is shown by the ungrammaticality of the (b) sentences below:

- (32) a. moto na nongone no moni  
man I take from money  
'The man I took the money from'
- b. \*moto na nongone moni  
man I take from money
- (33) a. kalati Kuo a. di no o tebedi  
book Kuo PA leave on table  
'The book Kuo left on the table'
- b. \*kalati Kuo a di o tebedi  
book Kuo PA leave on table
- (34) a. esukudu o posi no y-emedi wa  
school you choose PA accept you  
'The school you chose accepted you'
- b. \*esukudu o posi y-emedi wa  
school you choose PA accept you

Unlike object relativization, subject relativization does not require the marker no; in fact it does not allow no at all. What subject relativization requires is a relative pronoun, which must occur after the head (i.e. the relativized) noun:

- (35) a. nu muna a tóndì sango  
that child PA like father  
'That child likes his father'
- b. muna nu tóndí sango a sengane mo  
child RP like father PA listen to him  
'A child who likes his father listens to him'
- (36) a. diboa di bô mô  
ailment PA kill him  
'He died of an ailment'
- b. diboa di bô mô di si biané  
ailment RP kill him PA not known  
'The ailment he died of is not known'
- (37) a. leta di pof kiele  
letter {<sub>PA</sub>  
          {<sub>RP</sub>} come yesterday  
'The letter {<sup>came</sup>  
                  {which came} yesterday'

Because relative pronouns for all noun classes except 1 and 9 are homophonous with pre-verbal agreement morphemes (PA) of the same class, the raised tone on the verb will often be the only marker of relativization. If, however, the last syllable of the verb already has a high tone, the clause will be ambiguous between a relative and a non relative interpretation, as shown by sentence (37).

Returning now to the main issue, we see that the insertion of no in relative clauses will have to be made sensitive to the position in the sentence of the NP which is relativized. We want no to be inserted only when the Object NP is the head of the relative clause and prevent it from occurring when the subject of the clause is the NP "controlling" relativization. Assuming, following the traditional analysis, that Relative Clause Formation involves the deletion under identity of an embedded NP, the Duala particle no will have to be analyzed as the residue of the deletion of the Object NP.

The account of no presented in the three preceding sections leads to the rather strange consequence that Duala has two morphemes no, which just happen to share the same phonological representation and the same syntactic post-verbal position: one is inserted to mark the movement of a constituent from post-verbal to sentence initial position, the other is the residue of the deletion of an Object NP. Such an analysis clearly misses an obvious generalization about the syntactic behavior of no; by deriving it through two entirely different syntactic processes, one would implicitly be relegating to mere accident the fact that that morpheme, in the three constructions examined:

- (A) occurs in exactly the same position
- (B) never occurs in clauses where the element in initial position is also the subject, i.e. subject relativization, WH-questions involving the subject, focus of the subject



- (C) is always found in constructions which have, in clause initial position, constituents normally found post-verbally such as objects, adverbials and other types of modifiers.

Notice, furthermore, that in two of the three constructions in which it occurs, namely WH-questions and Focus constructions, no can be accounted for in a unitary manner as the result of a movement rule. Given the fact that it is not so much the different behavior of no in Relativization as it is the assumed difference between the latter and the previous two constructions which leads to positing two no, capturing the generalization about the occurrence of that morpheme entails re-analyzing Relativization in terms of a movement rule. We do not here consider the other logical possibility, which would be to try and analyze both WH-questions and Focus constructions in terms of a deletion.

#### 5. The Focus Position

In this section, we will show how facts such as the ones presented in the three preceding sections can give a natural explanation within a theory which allows the grammar of Duala to generate what we call, for lack of a better term, an optional Focus position.

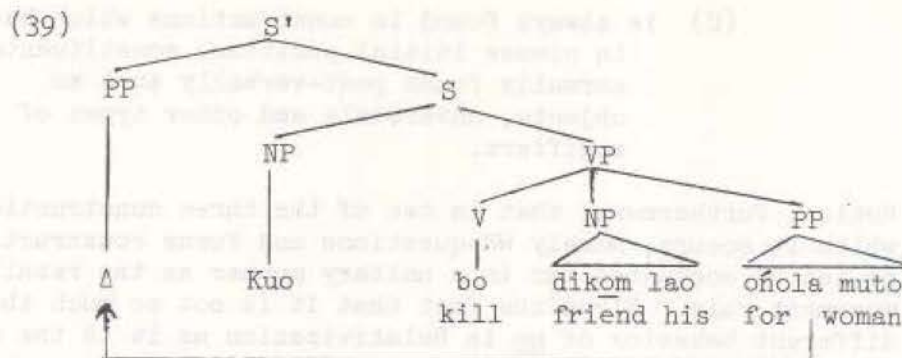
Let us start with Focus constructions by considering the sentences below.

- (38) a. kiele nde Kuo a wu no  
yesterday foc. Kuo PA return  
'It's yesterday that Kuo returned'
- b. oñola muto nde Kuo a bo no dikom lao  
for woman foc. Kuo PA kill friend his  
'It's because of a woman that Kuo killed his friend'
- c. tondo longo la loa bato nde dí lingisé mba  
liking your to insult people foc PA madden me  
'It's your liking to insult people which made me mad'

In the sentences above, different types of constituents appear in focus position: in (38a), the focus is a time adverb; in (38b), it is a prepositional phrase, and in (38c) a whole sentence. To account for such sentences, the Phrase Structure rules of Duala must optionally generate nodes like AP, NP, PP, and S in a position immediately to the left of the subject position, through a rule such as the one below,

$S' \rightarrow (\text{Focus}) S$

where 'Focus' serves as an abbreviation for any of the major phrase nodes. A sentence such as (38b) which has as its focus a PP, would come from a structure like the one following:



Two independent processes would relate the structure in (39) to sentence (38b): one, let us call it Cleft Formation, moves any constituent, except VP, from under S to the empty position in S' and inserts nde immediately after that constituent. The second process, which is simply a more general fact about Duala, inserts the marker no after the verb any time a constituent dominated by VP is moved to pre-subject position. The derivation of (38a) is identical to that of (38b), except that the moved constituent is an adverb, not a prepositional phrase. Notice, however, that (38c) only undergoes cleft formation (vacuously) and not no-insertion because the structural description of that transformation is not met.

Next, consider WH-questions; it is interesting to note that WH-preposing, which relates the following sentences,

- (40) a. wa pula nje?  
you want what  
'What do you want?'  
b. nje wa pula no?  
what you want  
'What do you want?'

cannot co-occur with clefting within the same clause, as shown by the sentences below.

- (41) a. Kuo a-andi nje kiele  
Kuo PA buy what yesterday  
'What did Kuo buy yesterday?'  
b. nje Kuo a-andi no kiele  
what Kuo PA buy yesterday  
'What did Kuo buy yesterday?'  
c. kiele nde Kuo a-andi no nje  
yesterday foc Kuo PA buy what  
'It's yesterday Kuo bought what?'  
d. \*kiele nde nje Kuo a-andi no (no)  
yesterday foc. what Kuo PA buy

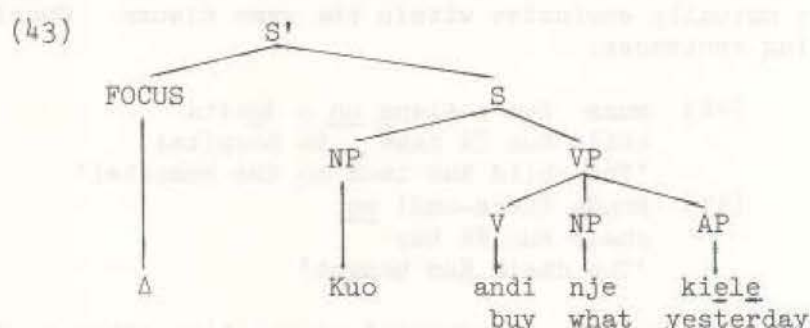
Sentences (41b) and (41c), which respectively involve WH-movement and Cleft formation, are grammatical, with (41c) being interpreted as an echo question; on the other hand, (41d) in which both Cleft formation and WH-movement have applied is totally unacceptable.



Likewise, sentences (42b) and (42c) are clearly ill-formed, whereas (41a) is grammatical:

- (42) a. nja n-andi mutowa mwa Kuo  
           who RP buy car of Kuo  
           'Who bought Kuo's car?'  
       b. \*nja mutowa mwa Kuo nde n-andi no  
           who car of Kuo foc. RP buy  
       c. \*mutowa mwa Kuo nde nja n-andi no  
           car of Kuo foc. who RP buy

The fact that Clefting and WH-movement are mutually exclusive will follow naturally if we assume that the position to which constituents are moved in both WH-movement and Clefting is the same. By generating a single position to the left of the subject position, we automatically rule out the possibility of generating the ungrammatical sentences (41d) and (42c). Consider, for instance, the sentences in (41): they would have the common underlying structure below:



Assuming, as we stated earlier, that Focus can be expanded as any of the major phrase node categories, let us consider the case where Focus dominates the node NP. In that case, either the subject Kuo or the Object nje in (43) can be moved to the NP position dominating the null symbol Δ. If we move the subject, and insert nde after it, we get the cleft sentence (44).

- (44) Kuo nde a-andi nje kiele  
       'It's Kuo who bought what yesterday?'

which, like (41c), is interpreted as an echo question. Alternatively, we can move the Object NP nje 'what' to the focus position, yielding (41b). Interestingly, however, we cannot perform both operations one after the other: the result would be the ungrammatical string (45).

- (45) \*nje Kuo nde a-andi no  
       what Kuo foc. PA buy

It seems clear that having the rules of WH-movement and Cleft formation move constituents to the same sentence initial position explains why the rules are mutually exclusive within the

same clause. As shown by sentences (41c), and (44), the co-occurrence restriction is not between WH-question and Clefting, but between the preposing of the WH-word and Clefting.

Let us finally turn to relativization. We have already presented some facts, based on the behavior of the particle no, which make it necessary to analyze relativization in Duala in terms of a preposing rule. We argued that the standard analysis of relativization would fail to capture a very significant generalization about the particle no, claiming in fact that that morpheme is triggered by two rules as formally different as a deletion rule and a movement rule. We believe that the generalization which needs to be captured in Duala is that relativization, just like WH-movement and Clefting, involves the movement of some constituent to clause initial position. Furthermore, the rules which move those constituents move them to the same position, the position we have called Focus. The main consequence of such an analysis is obvious: assuming that the movement rules involved are structure-preserving (in the sense of Emonds (1969) and Bowers (1973)), Clefting and Relativization will be mutually exclusive within the same clause. Consider the following sentences:

- (46) muna Kuo a-alane no o dokita  
 child Kuo PA take to hospital  
 'The child Kuo took to the hospital'
- (47) konda Kuo a-andi no  
 chair Kuo PA buy  
 'The chair Kuo bought'

they are unambiguously interpreted as relative clauses, although they do not exhibit an explicit relative marker. However, if we add the morpheme nde after the head noun, these sentences lose their relative clause interpretation and automatically become Cleft constructions:

- (48) muna nde Kuo a-alane no o dokita  
 'It's a child that Kuo took to the hospital'
- (49) konda nde Kuo a-andi no  
 'It's a chair that Kuo bought'

if we add a verb to the two sentences above (i.e. forcing a relative clause interpretation on them), they become ungrammatical:

- (50) \*muna nde Kuo a-alane no o dokita a boa  
 child foc. Kuo PA take to hospital PA be sick

In a similar fashion, WH-movement and Relativization are mutually exclusive, as shown by the sentences below:

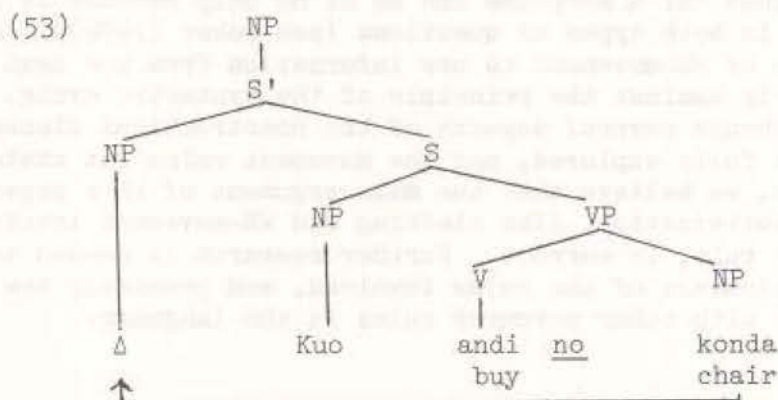
- (51) a. \*njika buña mutowa Kuo a-andi no  
 WH- day car Kuo PA buy  
 b. \*mutowa njika buña Kuo a-andi no



compare with the well formedness of the following sentences, in which only one movement has taken place:

- (52) a. njika buña Kuo a-andi no mutowa  
 WH- day Kuo PA buy car  
 'When did Kuo buy a car?'  
 b. mutowa Kuo a-andi no njika buña  
 car Kuo PA buy WH- day  
 'A car Kuo bought when?' (dubitative)

The facts above lend syntactic support to our proposal to derive relative clauses by a rule which not only moves the relativized NP leftward, but moves it to the same position as the one needed for WH-movement and Clefting. A relative clause such as (47) would come from a structure like the one below:



Relative clause formation can simply be seen as a rule which moves an NP from an embedded S to an empty NP position under S'. The independently needed rule of no-insertion ensures, in the case of (53), that no is inserted after the main verb since the element moved originates in post-verbal position. Notice also that the structure above also underlies subject relativization; in other words, in our analysis, the difference between subject and object relativization lies, not in their respective underlying structures, but in which NP is moved to fill the empty focus position. The only constraint to which these movement rules are subjected is that there be no "doubling" of phrase structure positions at any level (see Emonds (1969:section II.6) for a discussion of doubly-filled and empty nodes). This prevents moving a constituent to a position which has already been filled.

## 6. Conclusion

We hope to have shown in this paper that in order to explain certain syntactic similarities, in particular with respect to the occurrence of the marker no, between relativization, clefting, and WH-questions, it is necessary to assume that they all involve the leftward movement of a constituent to sentence initial position. Given the fact, which has been noted in the literature, that these processes involve the foregrounding, semantically speaking, of the preposed constituent, we submitted that the PS rules of Duala generate a focus position through the rule S' → Focus S.

If the analysis proposed here is correct, it raises some serious problems concerning the existence of a level of Deep Structure. In the account of relativization presented above, for instance, both Subject and Object relativization have the same underlying structure, and the operations which apply to this structure determine the semantic interpretation assigned to the sentence; one can therefore not separate syntax from semantics, since the two go side by side. This, of course, goes against both the Deep Structure and the meaning preserving hypothesis. Next, consider the fact that WH movement is optional in direct questions, but obligatory in indirect questions; despite the fact that we did not provide a formal statement of the rule in this paper (see Epée (forthcoming) for a more detailed analysis), it seems clear that it will have to "see" what is on the next cycle to know whether to apply optionally or obligatorily. Notice that the Q morpheme can be of no help because it is present in both types of questions (see Baker (1970)). Allowing the rule of WH-movement to use information from the next cycle is clearly against the principle of the syntactic cycle.

Although several aspects of the constructions discussed were not fully explored, and the movement rules not stated more formally, we believe that the main argument of this paper, namely that relativization, like clefting and WH-movement involves a movement rule, is correct. Further research is needed to state the particulars of the rules involved, and precisely how they interact with other movement rules in the language.

#### Footnotes

\*I wish to thank John S. Bowers for many helpful suggestions during the writing of this paper. Thanks are also due to Wayles Browne III and Joseph Grimes for discussing an earlier version of the paper with me. All remaining inadequacies are due to my own stubbornness.

<sup>1</sup>Duala is a Bantu language spoken in the South of Cameroun.

<sup>2</sup>This sentence is ambiguous; on one reading the focus is jombe 'door', in which case a possible tag is ...seto winda 'not the window'. The other reading, where the main verb is the focus, is considered here. We shall return to this type of ambiguity shortly.

<sup>3</sup>The change in the final vowel, from tilea to tilee is a general phenomenon with verbs ending in -a. The change occurs in the three constructions under discussion when the verb is in the present tense or when it is embedded under the future auxiliary mende 'will'.



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